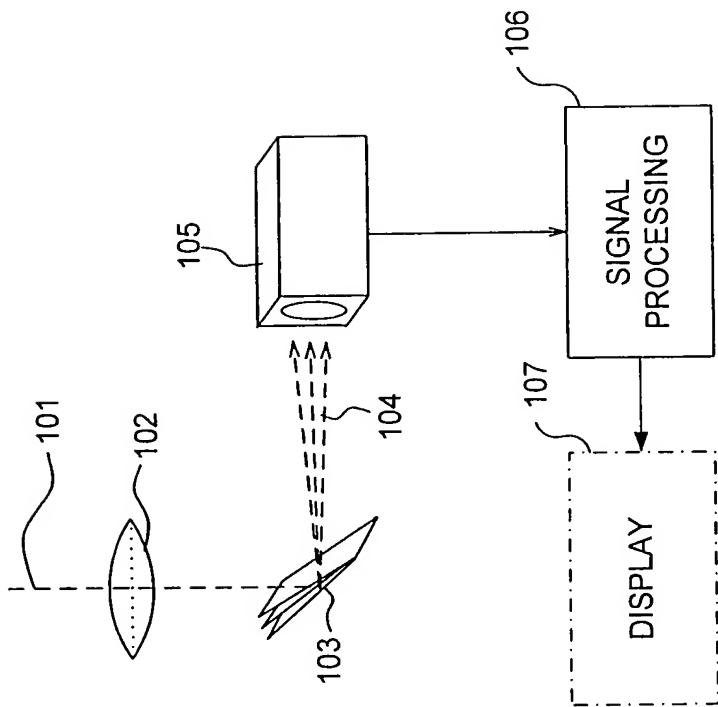


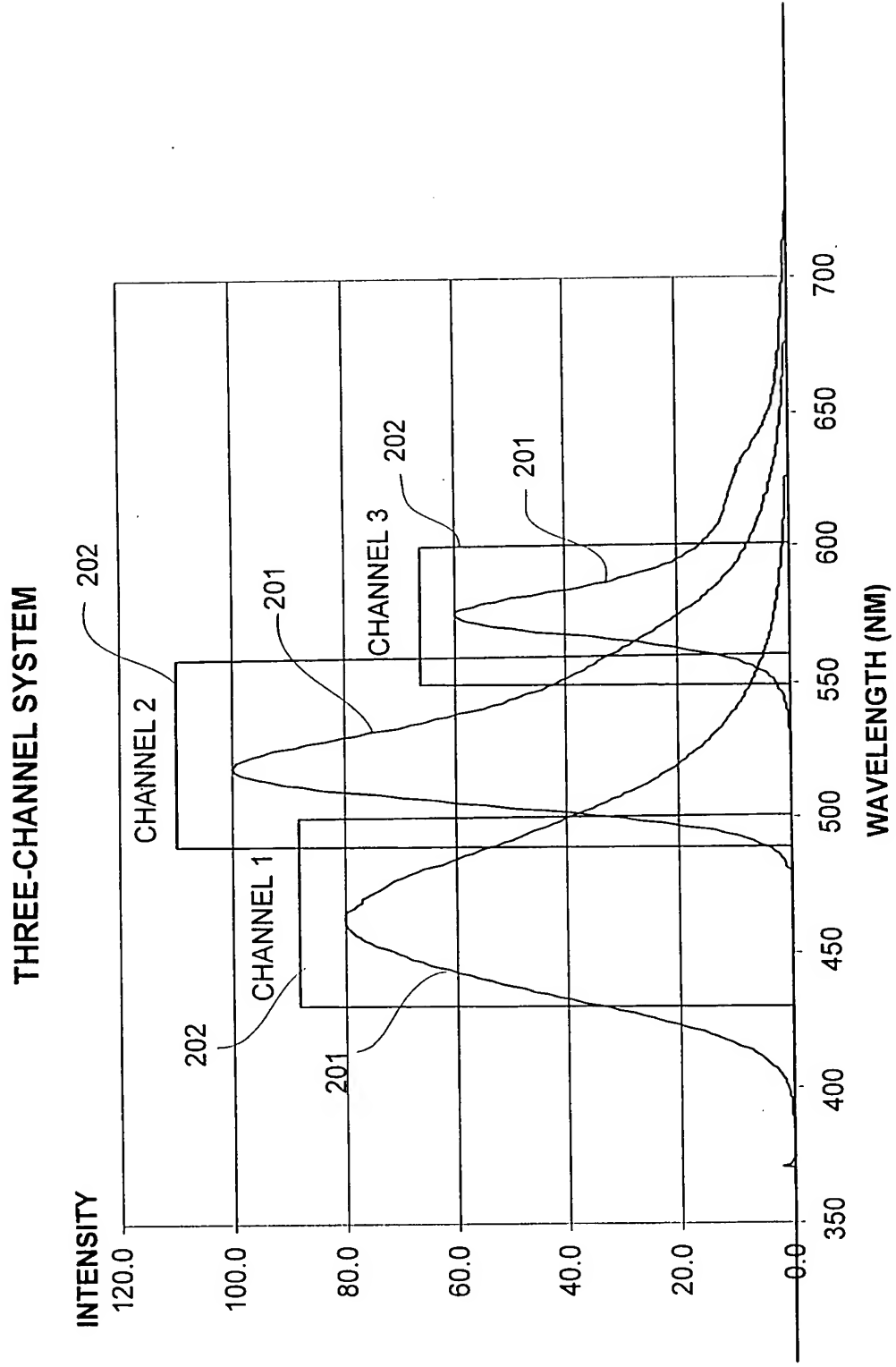
**FIG. 1A**

MULTIPLE CAMERAS WITH DEDICATED FILTERS

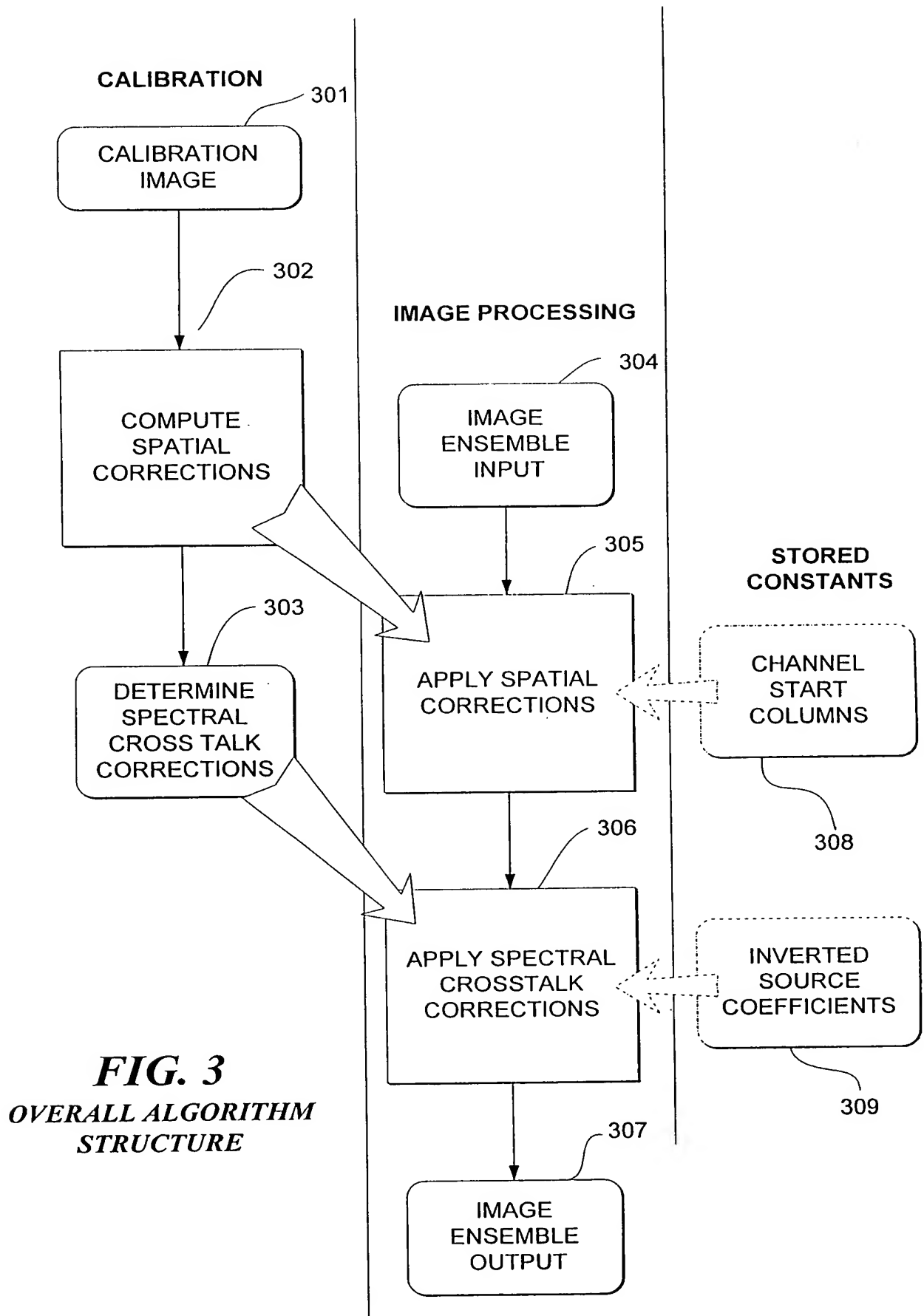


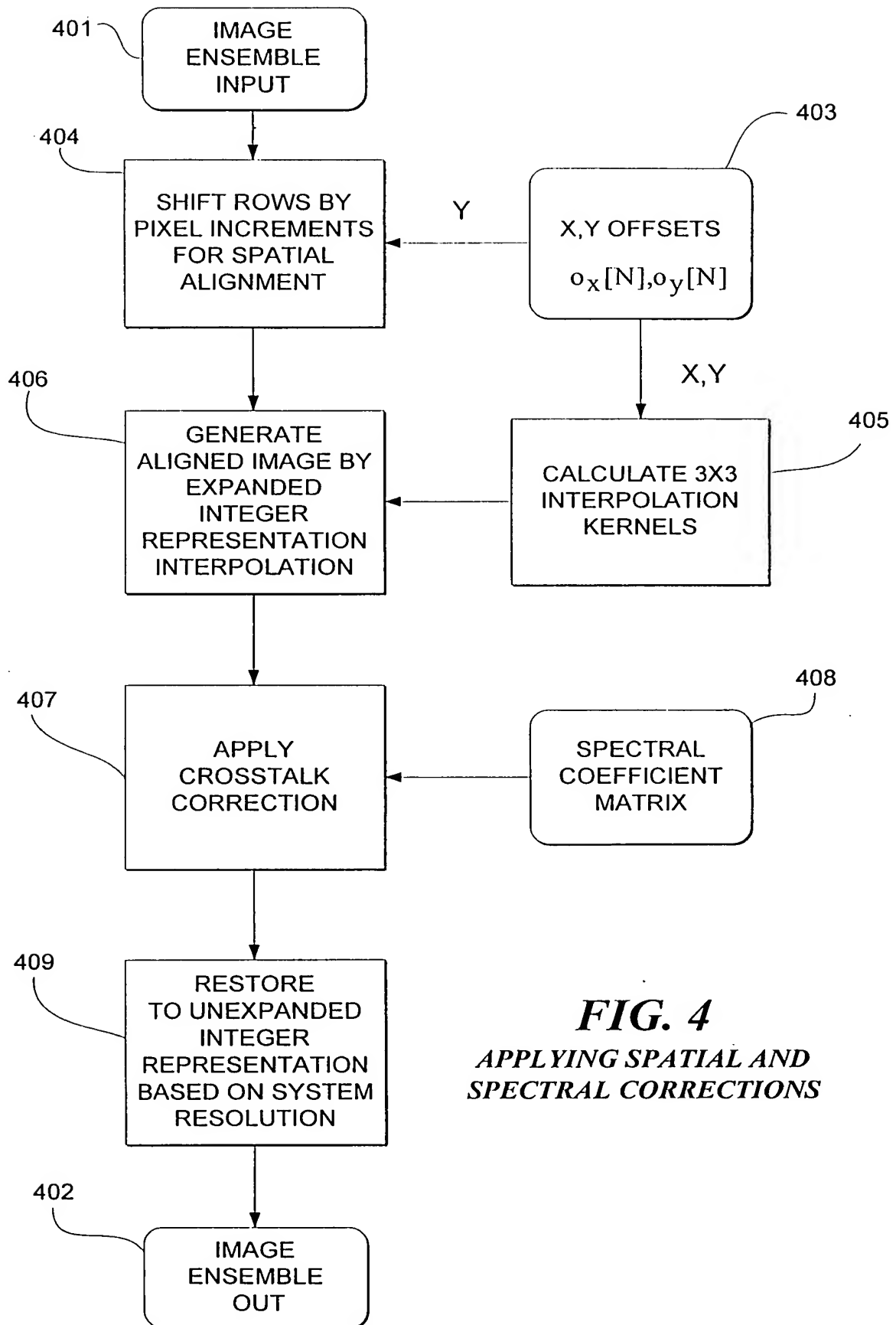
**FIG. 1B**

SINGLE CAMERA WITH STACKED FILTERS

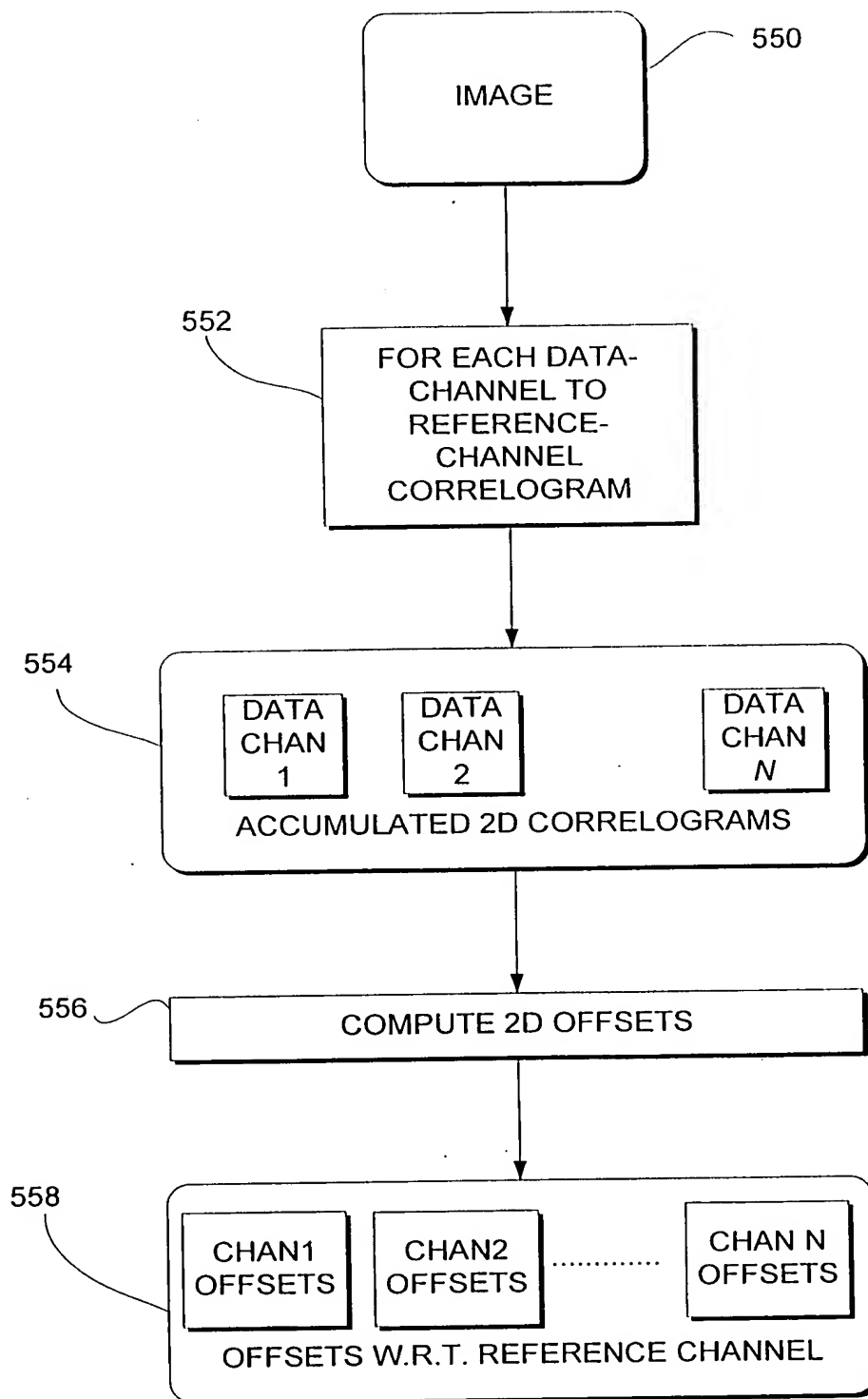


**FIG. 2**  
*ILLUSTRATION OF CROSS-TALK IN  
MULTICHANNEL IMAGING SYSTEM*

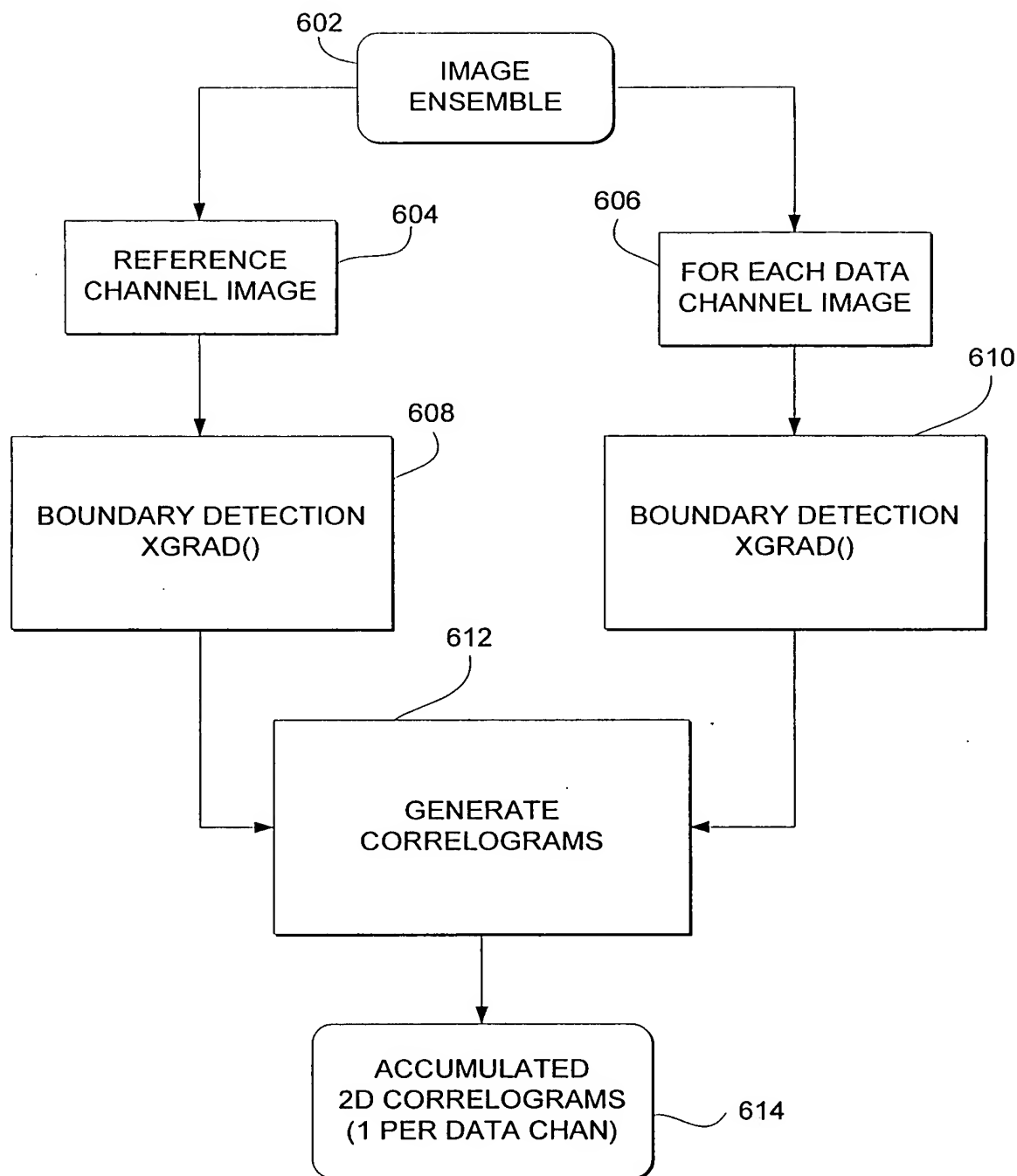




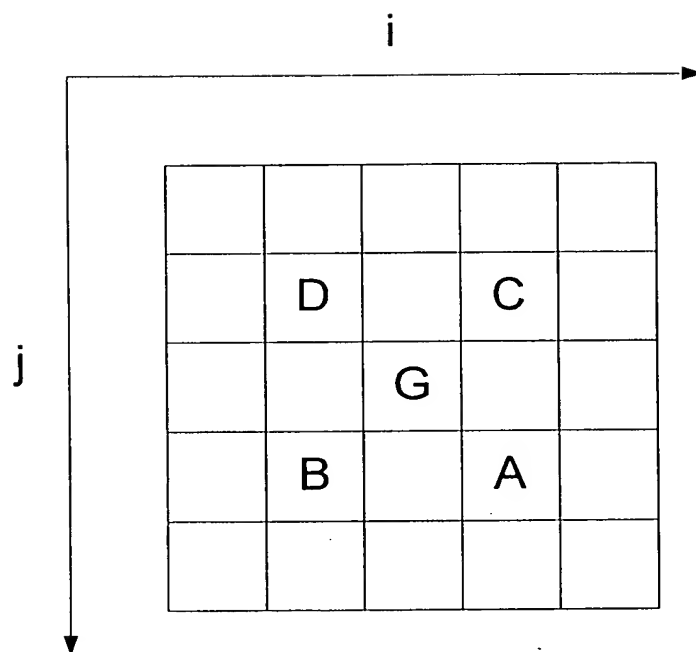
**FIG. 4**  
**APPLYING SPATIAL AND SPECTRAL CORRECTIONS**



**FIG. 5**  
**COMPUTE SPATIAL OFFSETS**  
**BETWEEN CHANNELS**

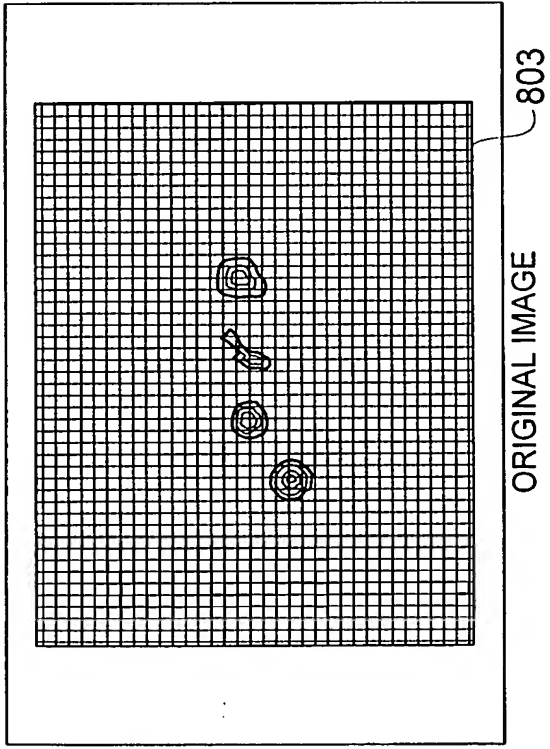


**FIG. 6**  
**BUILDING THE AVERAGE CORRELOGRAM**

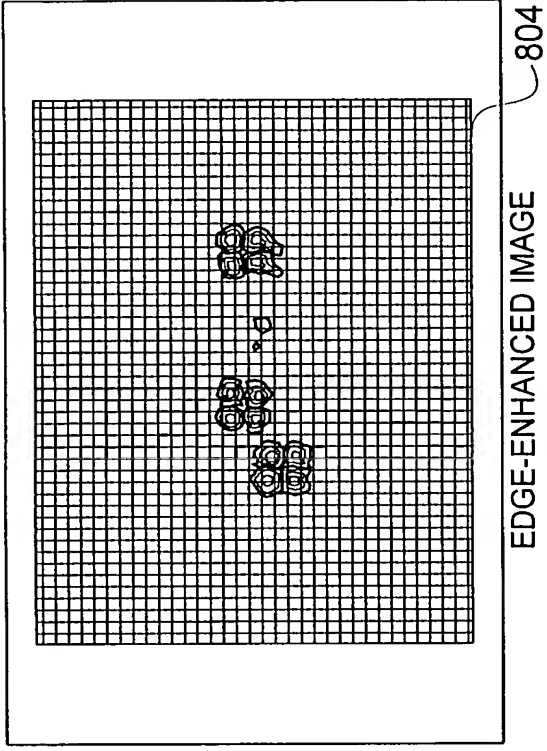
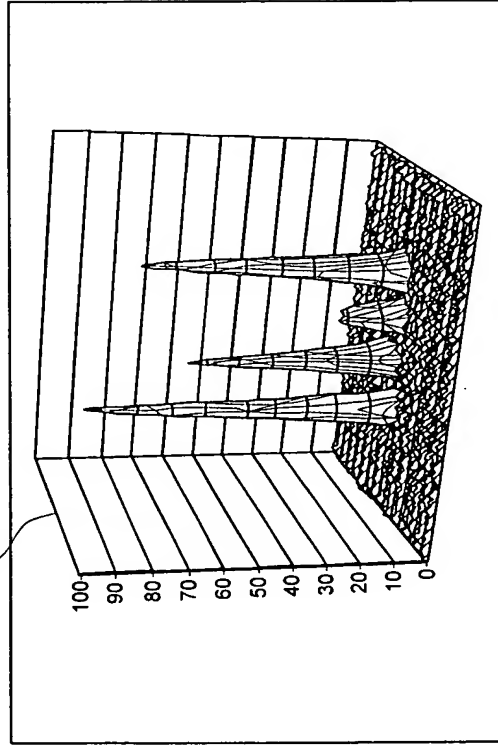


$$G = \text{abs}[(A - B) - (C - D)]$$

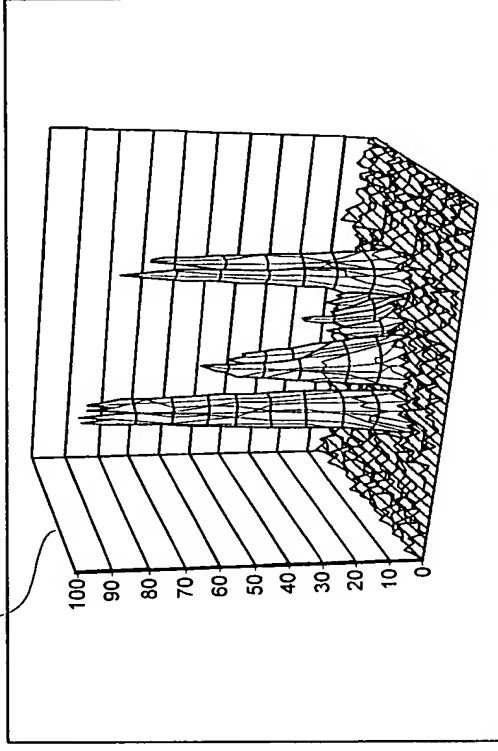
***FIG. 7***  
***2-DIMENSIONAL GRADIENT OPERATOR***



801



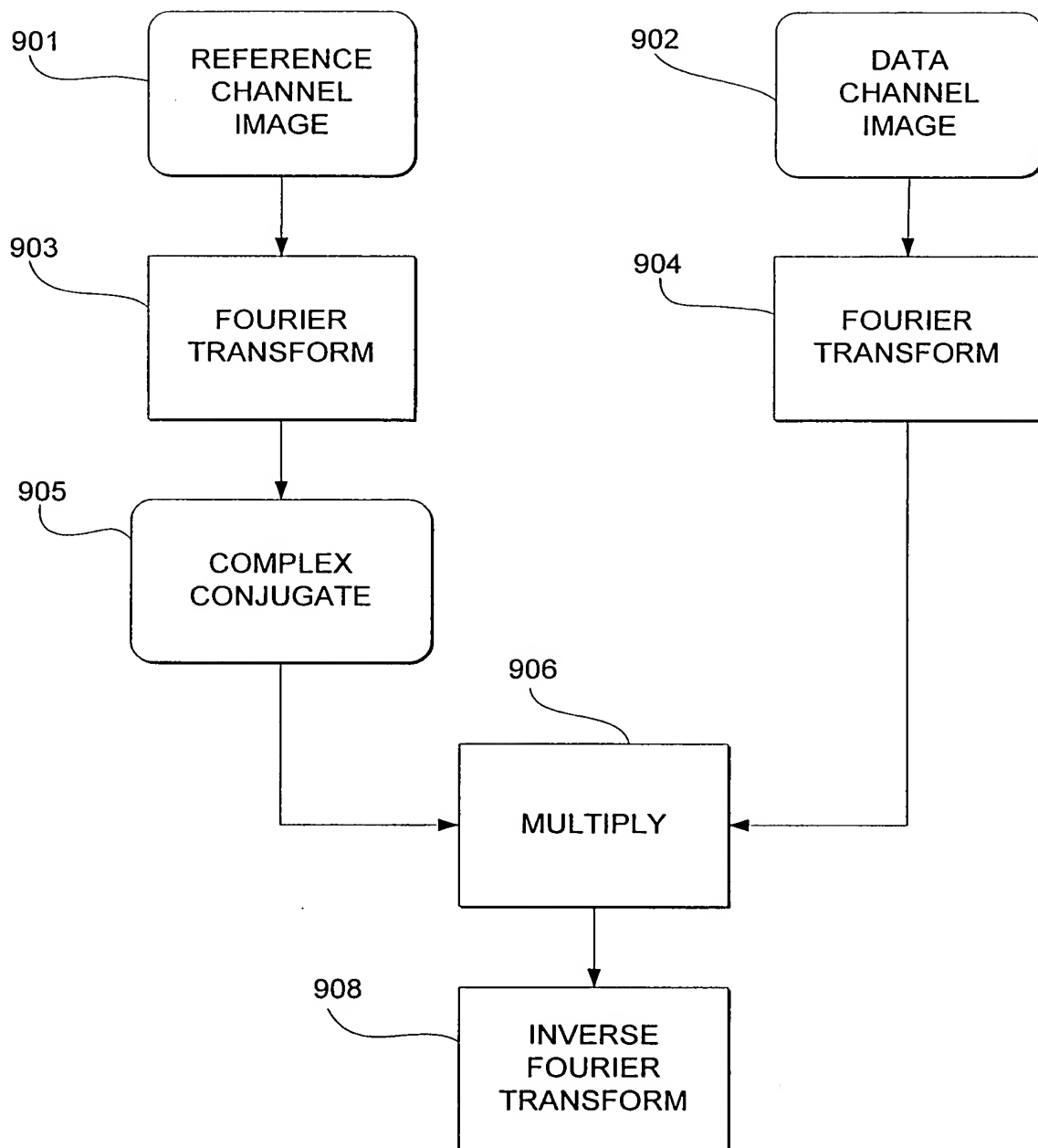
802



EFFECT OF THE GRADIENT OPERATION

**FIG. 8**





**FIG. 9**  
**CONVOLUTION AS MULTIPLICATION IN THE**  
**FREQUENCY DOMAIN**





























CHANNELS:

REF

D1

D2

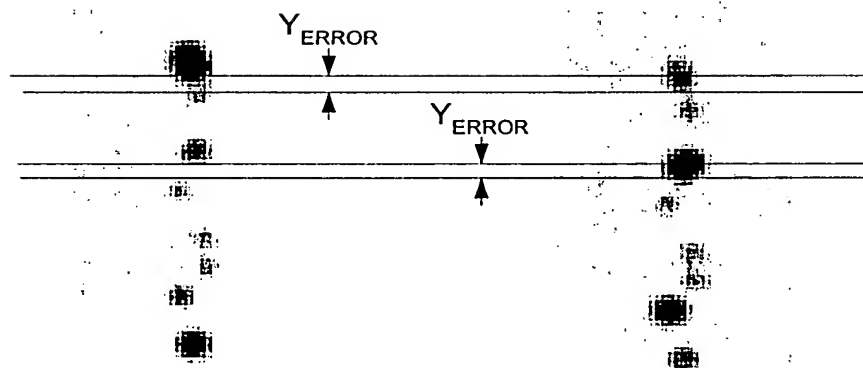
D3

<u>1001</u>	<u>1002</u>	<u>1003</u>	<u>1004</u>
			
			
			
			
			
			
			

***FIG. 10***

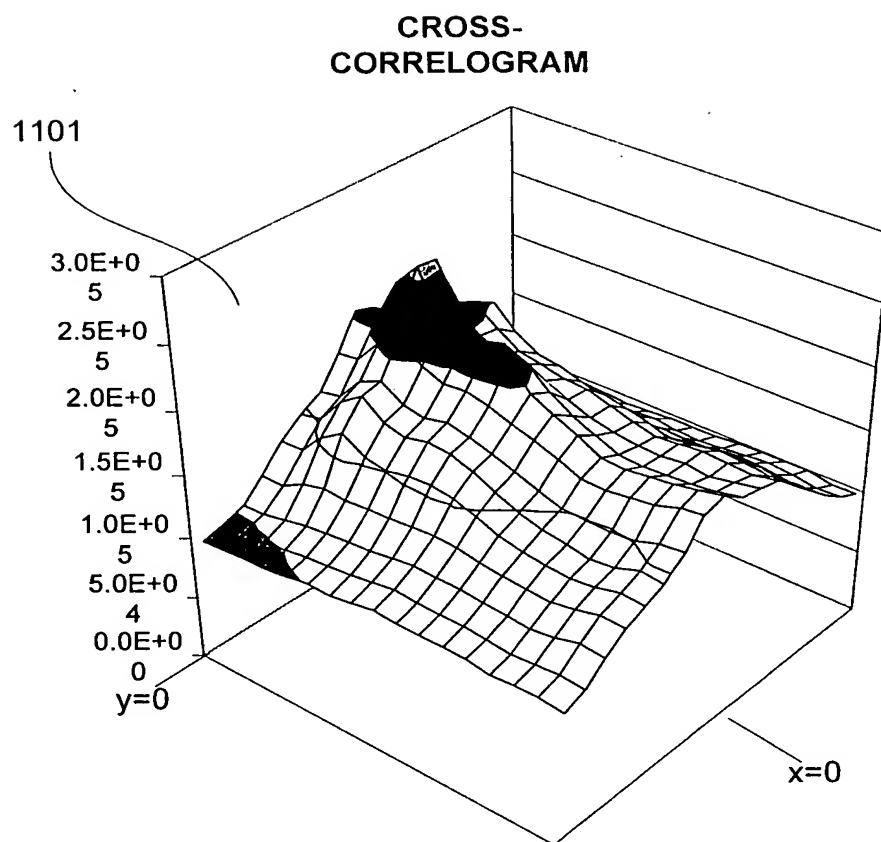
1101

1102

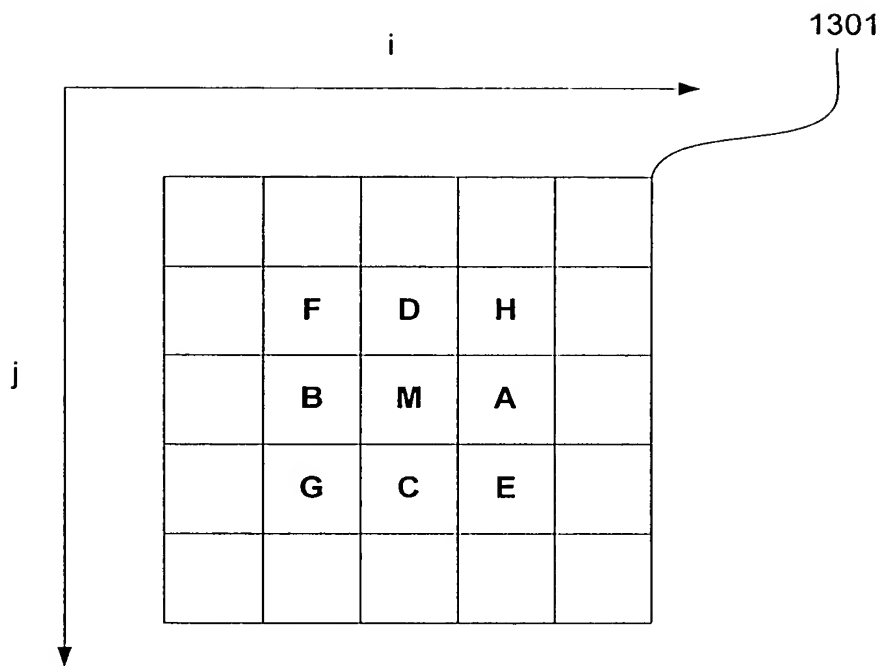


***FIG. 11***

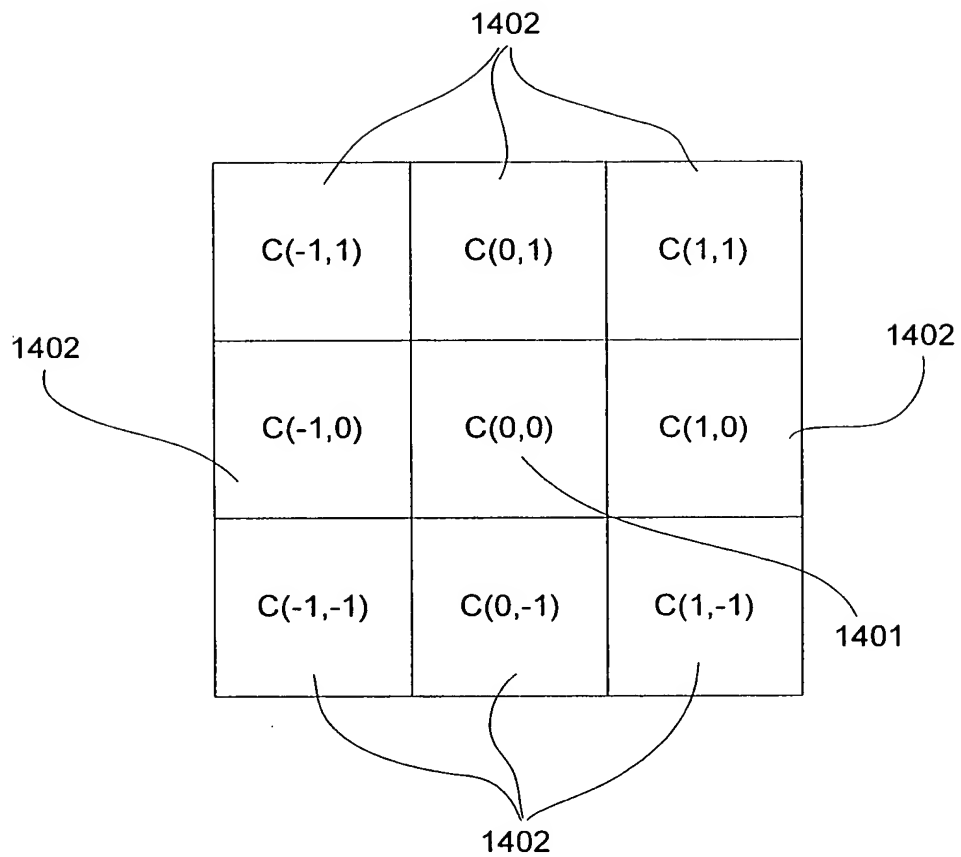
***IMAGES TO BE  
REALIGNED***



***FIG. 12***  
***CORRELOGRAM OF THE***  
***MISALIGNED IMAGES***



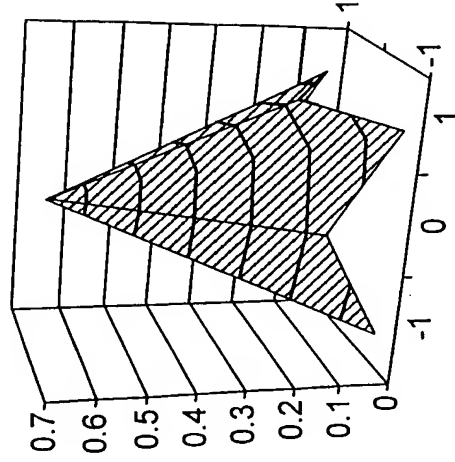
***FIG. 13***  
***PIXEL DESIGNATIONS FOR***  
***CORRELOGRAM SURFACE***  
***DERIVATIVES***



***FIG. 14***  
***COEFFICIENT MATRIX FOR***  
***3X3 INTERPOLATION***

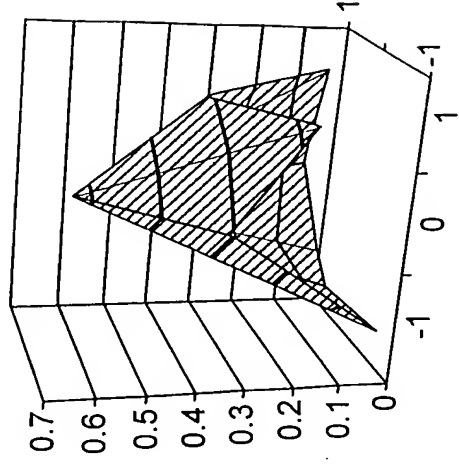
1501

INTERPOLATION COEFFICIENTS FOR  
ZERO OFFSET CORRECTION



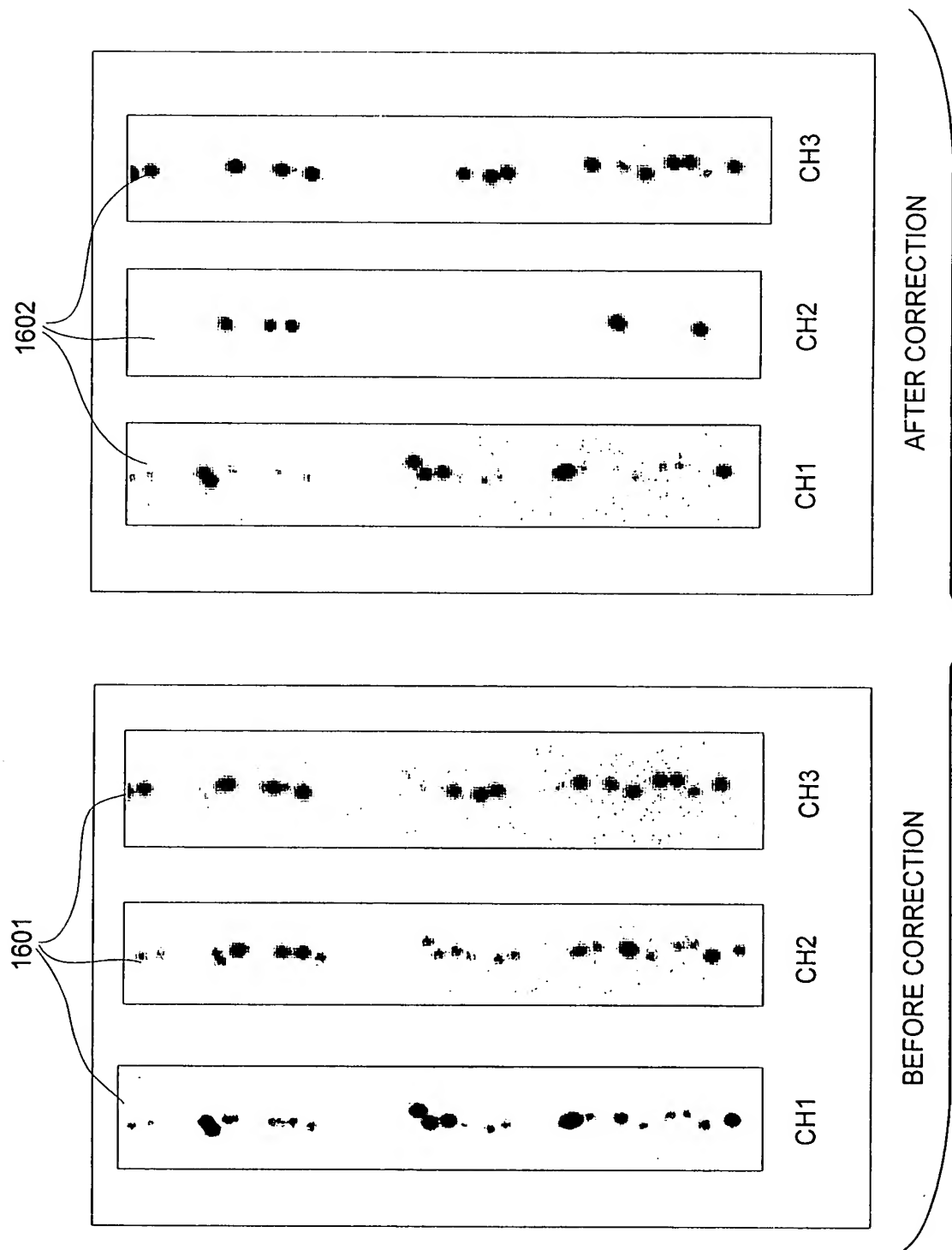
1502

COEFFICIENTS FOR OFFSET  
OF 0.3, 0.3 PIXELS



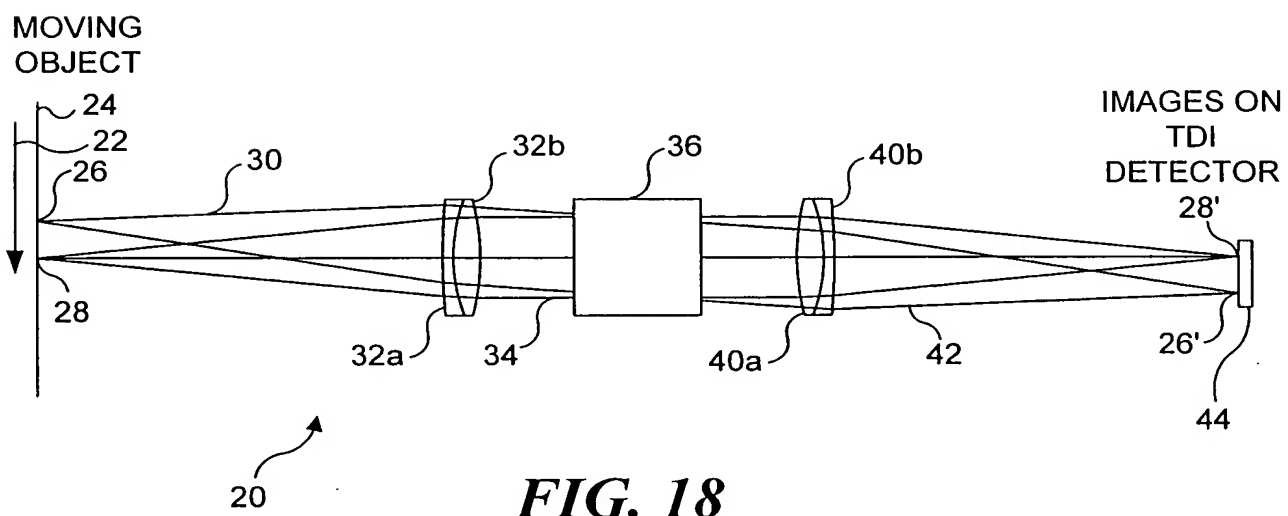
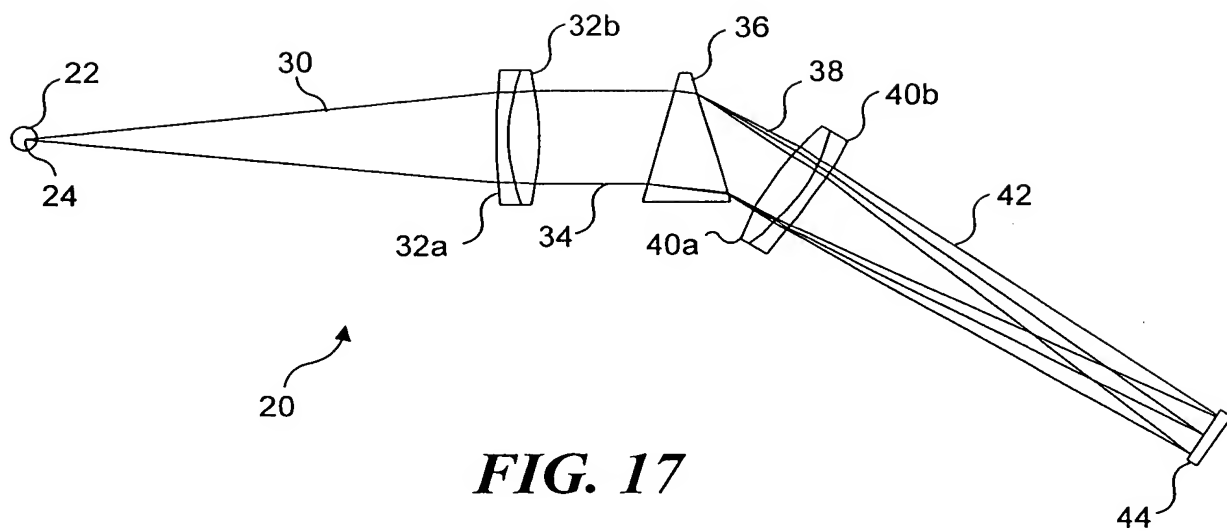
3X3 IMAGE ALIGNMENT COEFFICIENT  
MATRIX FOR TWO CASES

**FIG. 15**

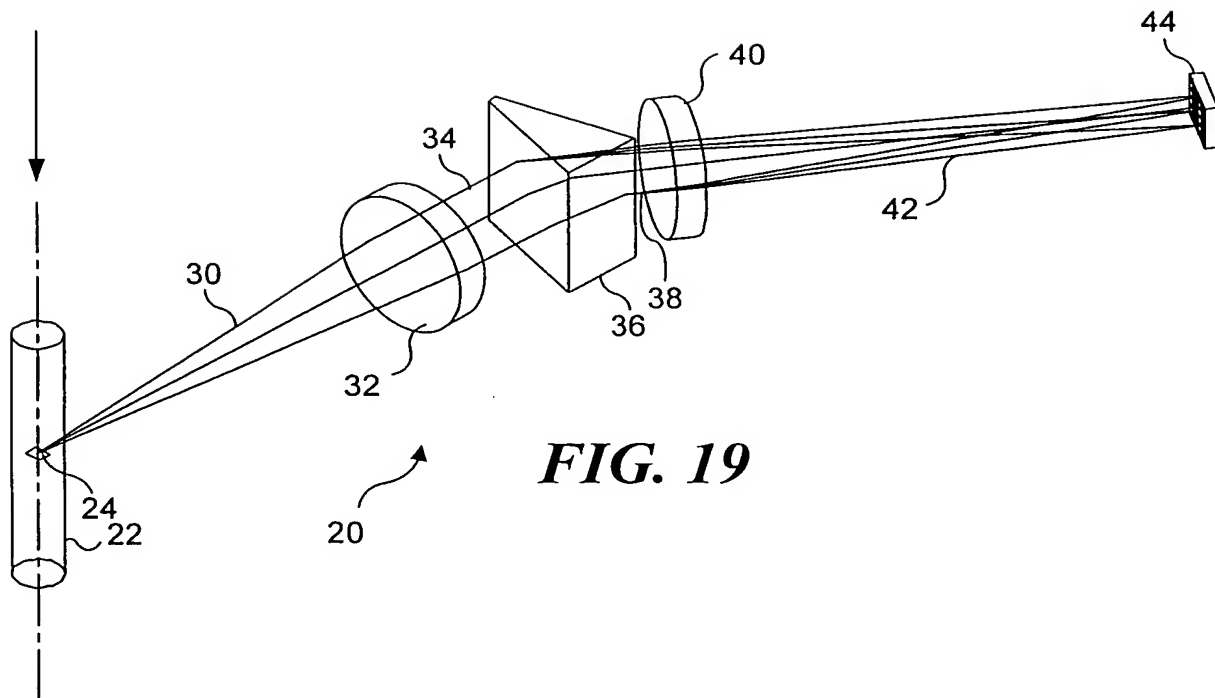


**FIG. 16**  
 REALIGNMENT AND CROSSTALK CORRECTION  
 APPLIED TO MULTI-CHANNEL IMAGE

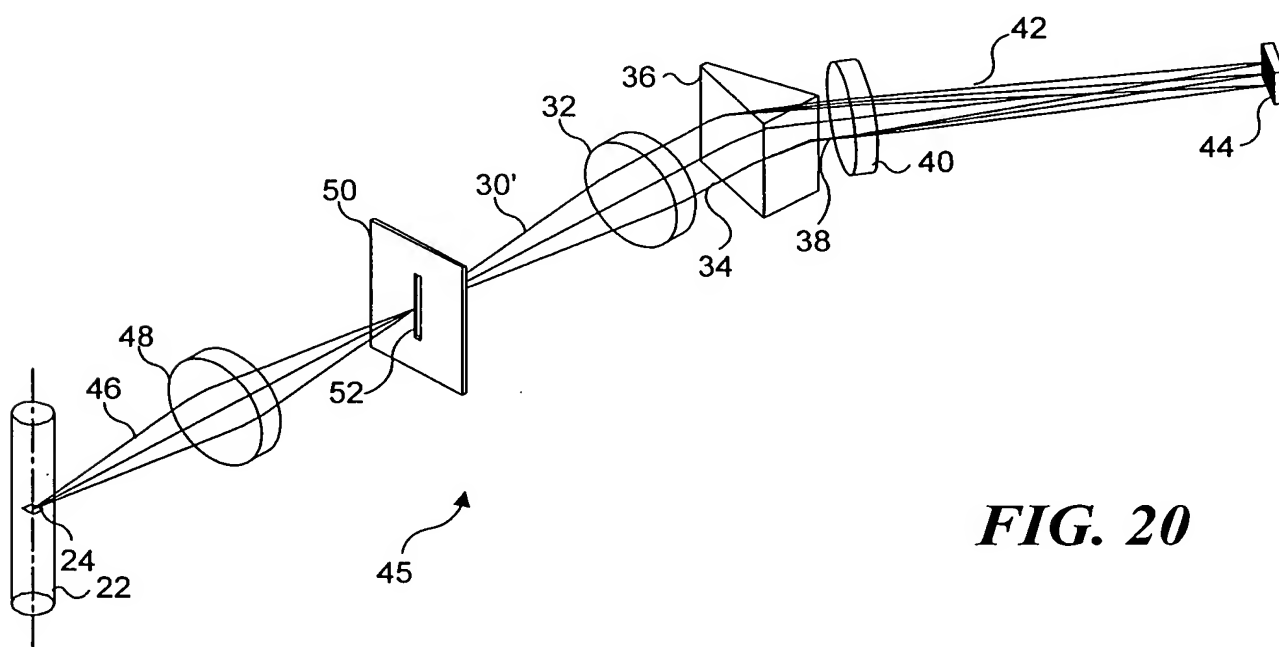




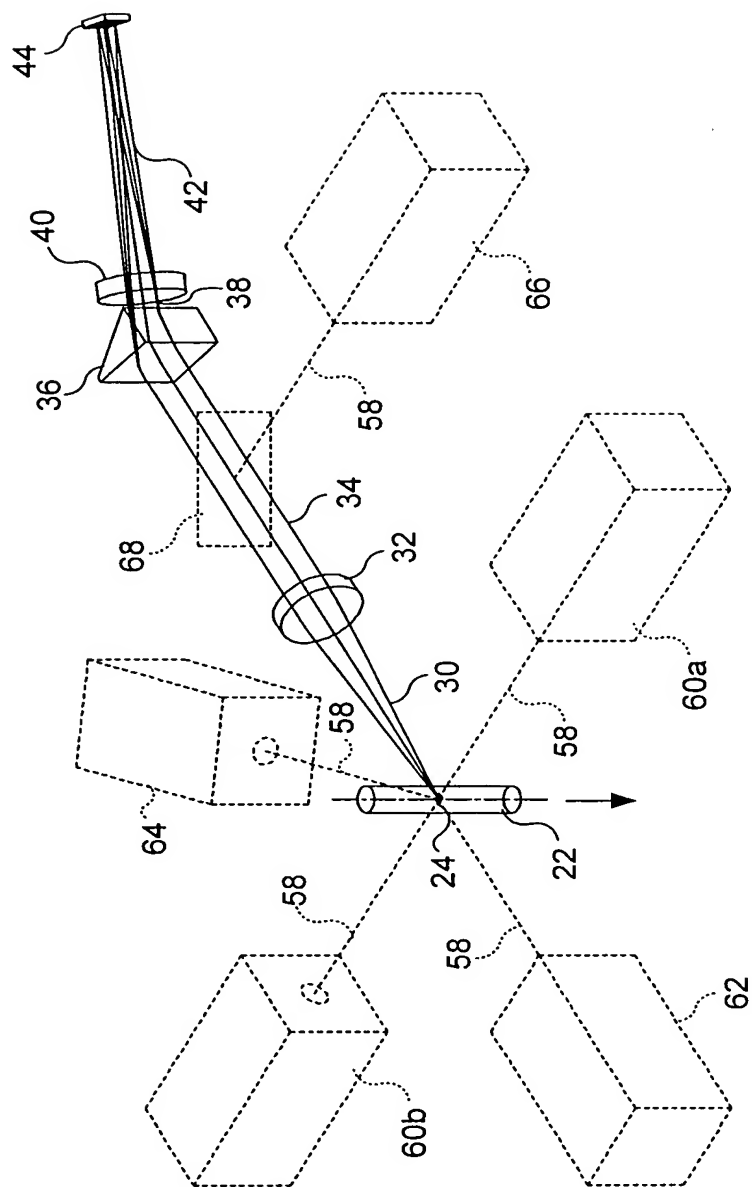
MOVING  
OBJECT



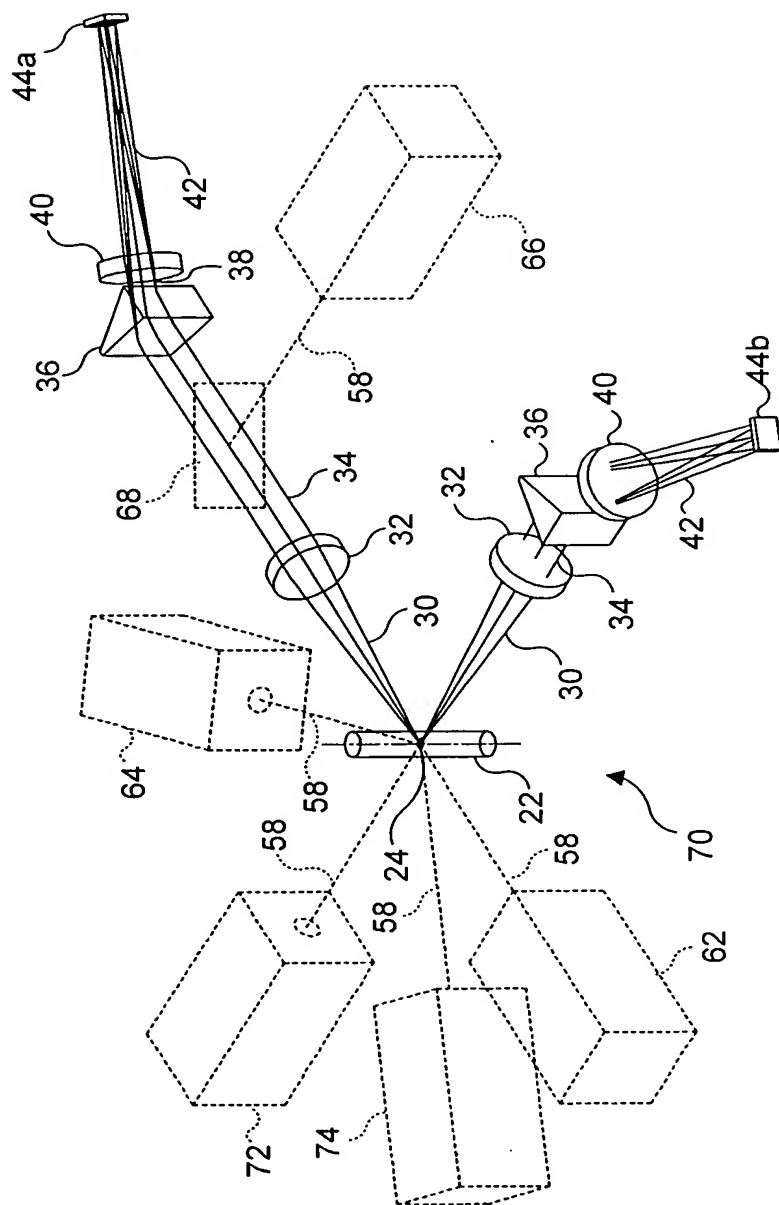
**FIG. 19**



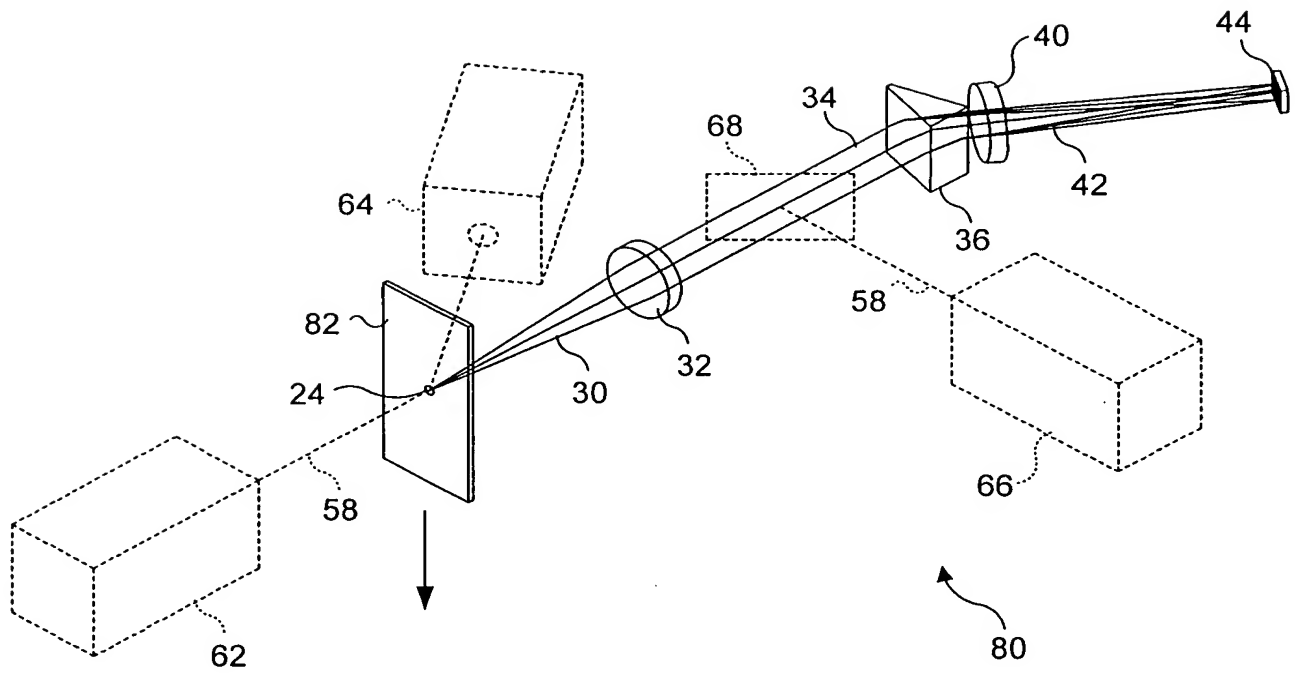
**FIG. 20**



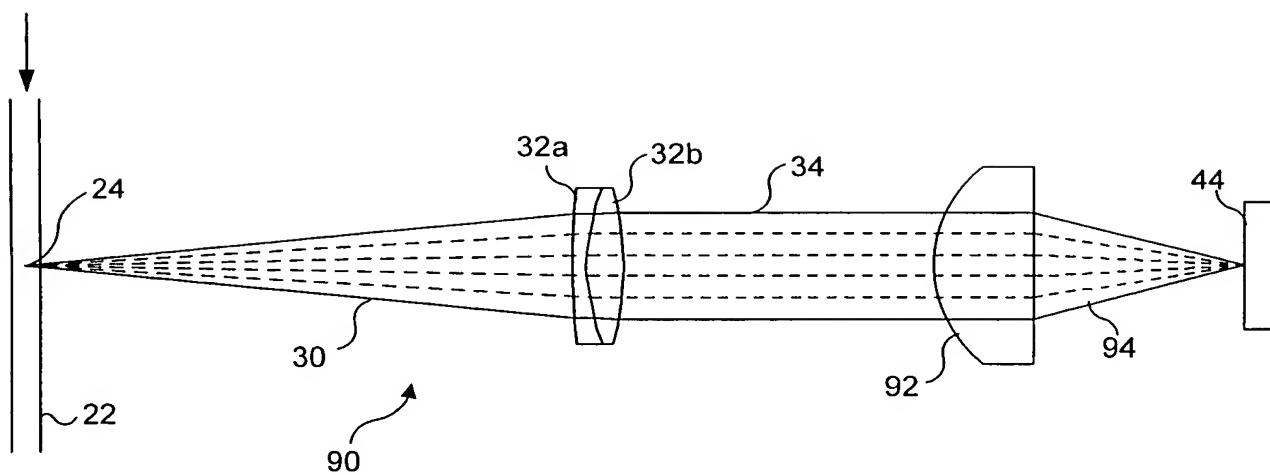
**FIG. 21**



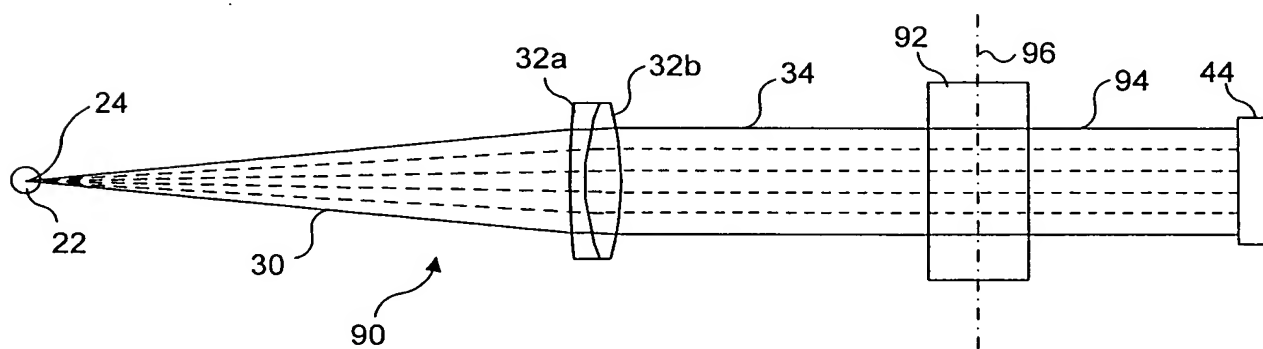
**FIG. 22**



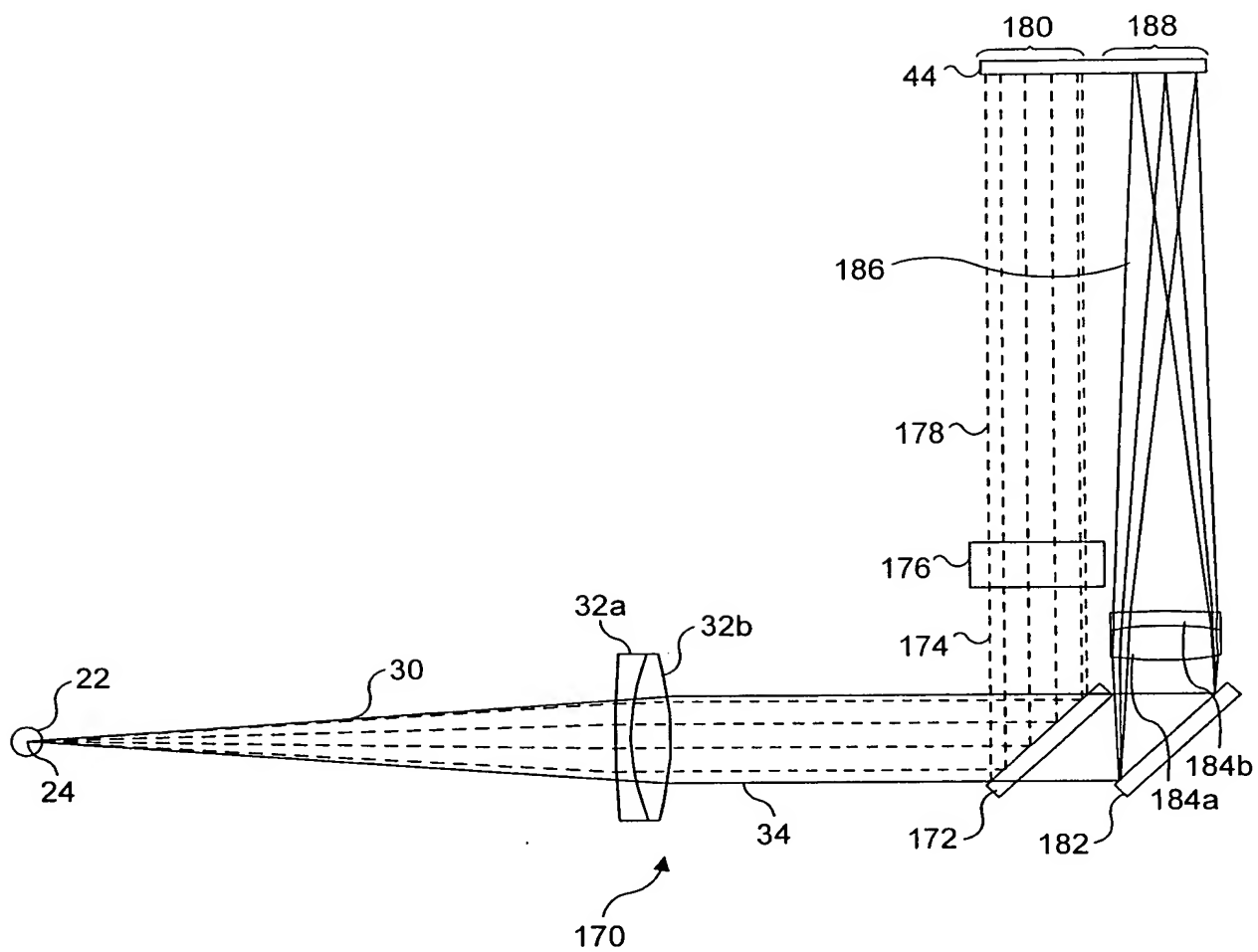
**FIG. 23**



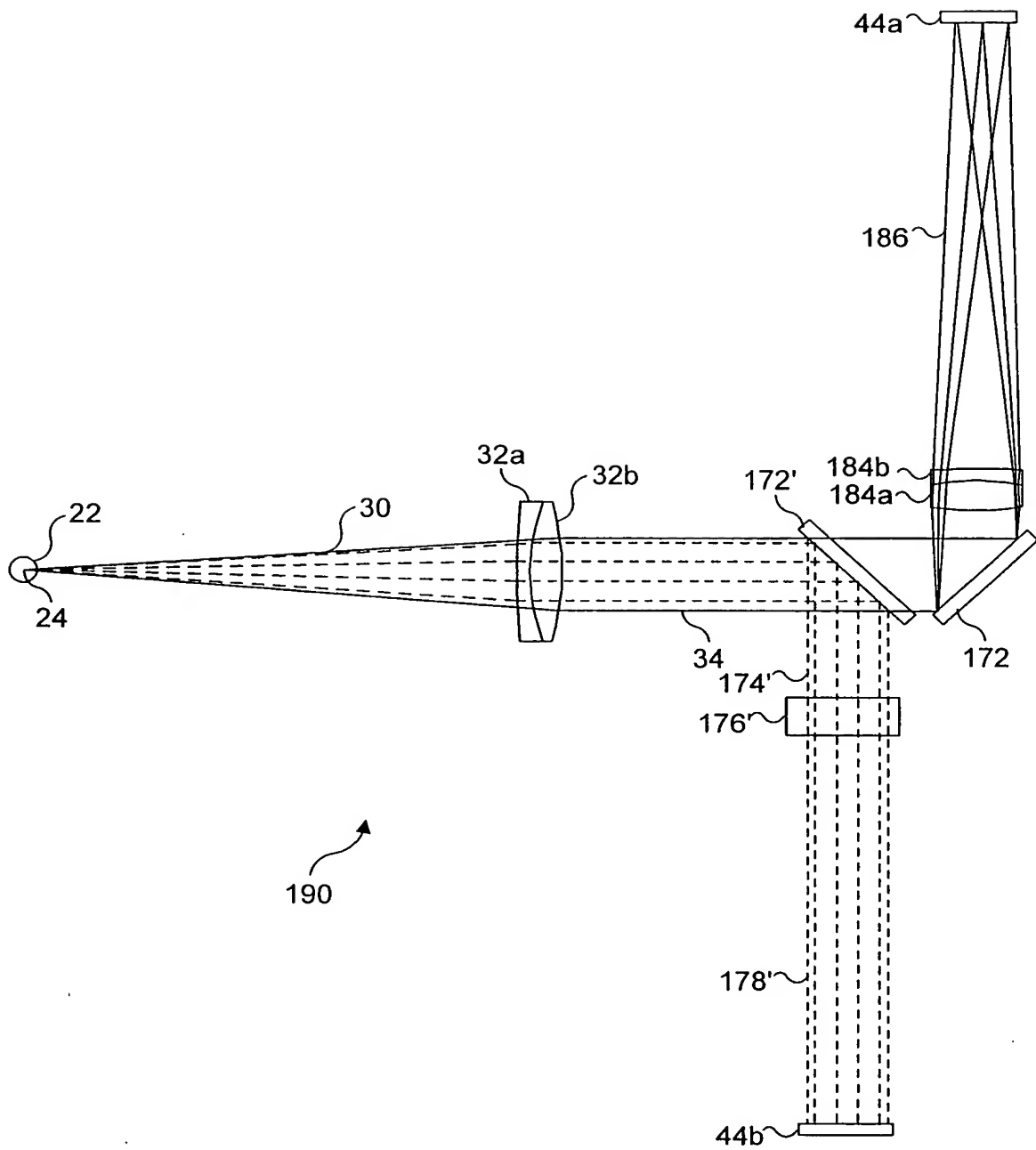
**FIG. 24A**



**FIG. 24B**

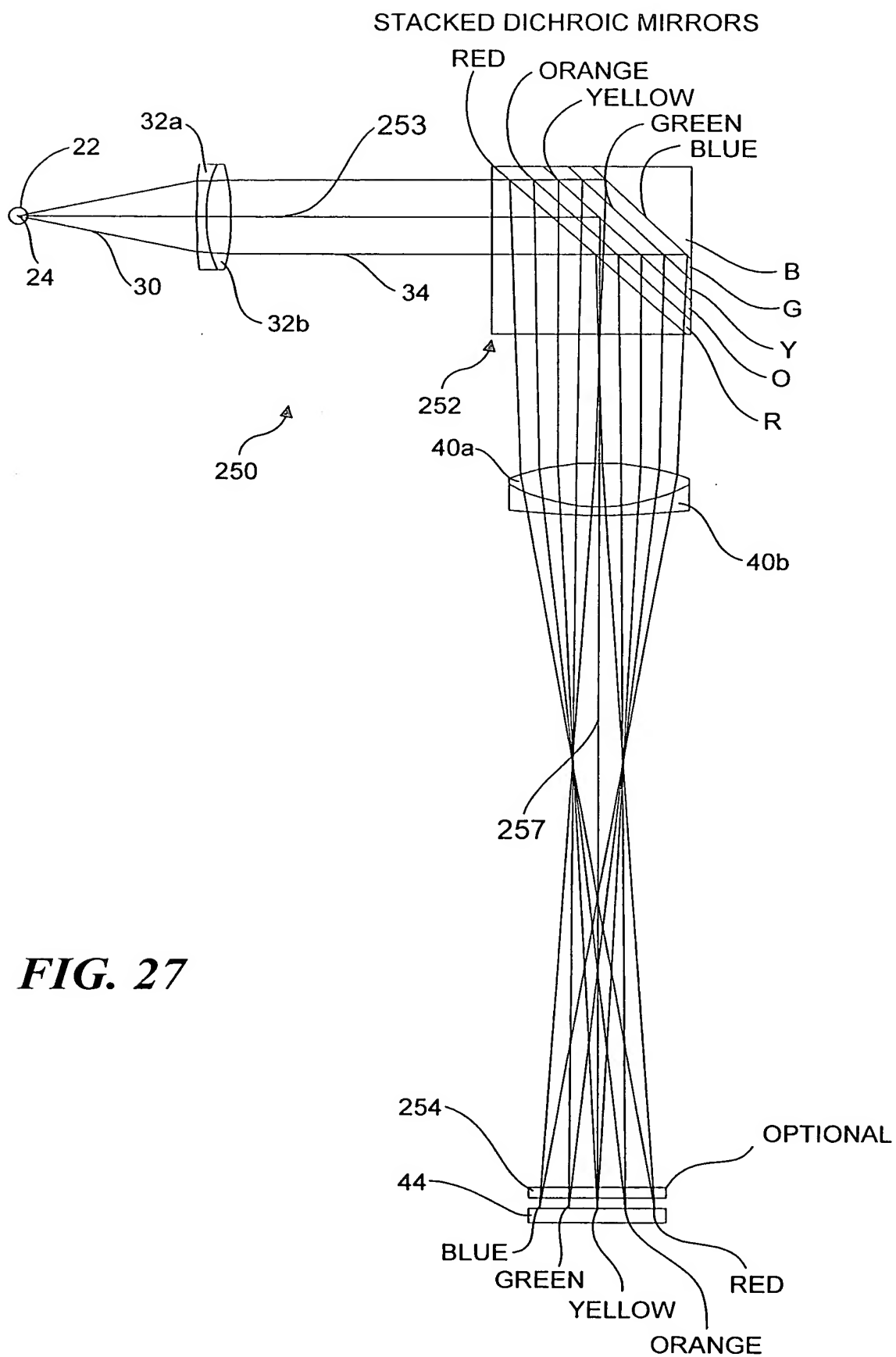


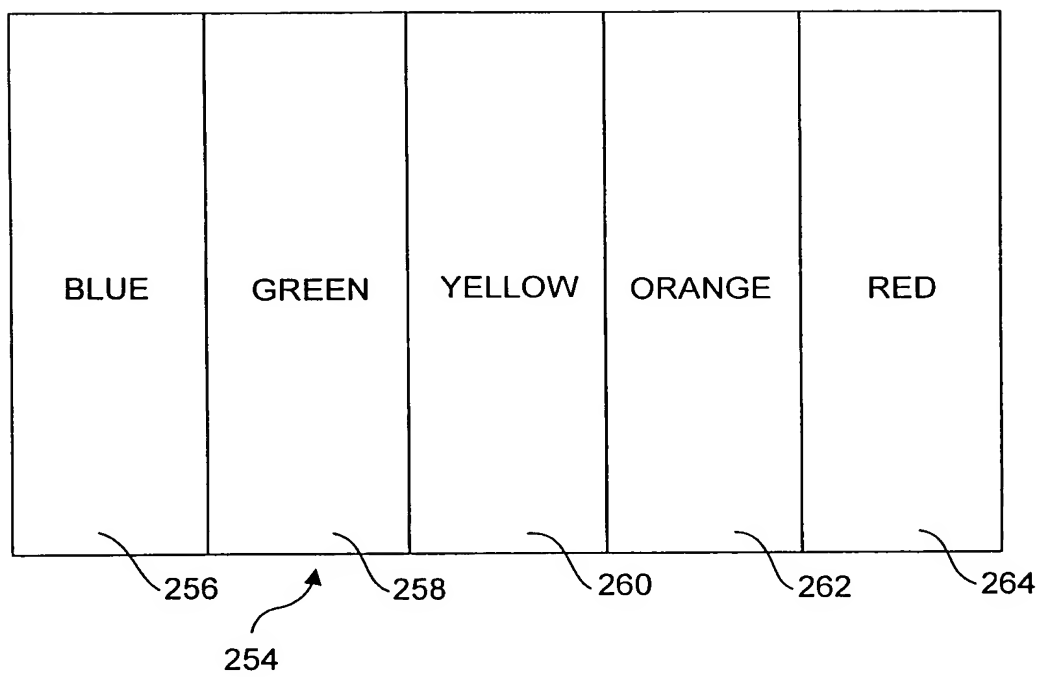
**FIG. 25**



**FIG. 26**







***FIG. 28***

